

**WHAT IS CLAIMED:**

1. A UV lamp system, comprising:
  - a power supply;
  - a cable connected to the power supply;
  - an irradiator connected to the cable and powered by the power supply;
- 5 an RF screen releasably attached to the irradiator by a snap-fit connection; and  
a snap-fit fastener assembly used to effect the snap-fit connection between the RF screen and the irradiator.
  
2. The UV lamp system of claim 1, wherein the irradiator has a reflector with a curved reflecting surface and a pair of flanges, and wherein the RF screen is releasably attached to the pair of flanges of the irradiator by the snap-fit fastener.
  
3. The UV lamp system of claim 1, wherein the snap-fit fastener is a ball stud fastener having a ball stud located on one of the RF screen or irradiator, and having a spring latch located on the other of the RF screen or irradiator, the ball stud releasably engageable with the spring latch in order to effect the snap-fit connection.
  
4. The UV lamp system of claim 1, further comprising a gasket disposed between the RF screen and the irradiator.
  
5. The UV lamp system of claim 1, wherein the snap-fit fastener is a spring retainer having a spring clip located on one of the RF screen or irradiator, and having a notch present in the other of the RF screen or irradiator, the spring clip releasably engageable with the notch in order to effect the snap-fit connection.
  
6. The UV lamp system of claim 1, wherein the RF screen has at least one slot located thereon for aiding in the removal of the RF screen from the irradiator.
  
7. The UV lamp system of claim 4, wherein the gasket is selected from the group

consisting of a metallic finger gasket, and a metal fabric wrapped around an elastomer sponge core center gasket.

8. The UV lamp system of claim 1, wherein the snap-fit fastener is a finger gasket assembly having a metallic finger gasket located on one of the RF screen or the irradiator, and having a notch present in the other of the RF screen or the irradiator, the metallic finger gasket releasably engageable with the notch in order to effect the snap-fit connection, and the finger gasket assembly aiding in sealing of the irradiator.

9. The UV lamp system of claim 1, wherein the snap-fit fastener is a magnetic fastener.

10. The UV lamp system of claim 1, wherein the snap-fit fastener is a quarter-turn type fastener.

11. A reflector and RF screen assembly for a UV lamp system, comprising:  
a reflector having a curved reflecting surface and a pair of flanges;  
an RF screen having a frame and a screen retained by the frame, the RF screen releasably attached to the reflector by a snap-fit connection between the frame of the RF screen and the pair of flanges of the reflector; and  
at least one snap-fit fastener assembly used to effect releasable attachment between the frame of the RF screen and one of the flanges of the reflector, and at least one snap-fit fastener used to effect releasable attachment between the frame of the RF screen and the other one of the flanges of the reflector.

12. The reflector and RF screen assembly of claim 11, wherein at least one of the snap-fit fasteners is a ball stud fastener having a ball stud located on the frame of the RF screen or one of the flanges of the reflector, and having a spring latch located on the other of the frame of the RF screen or one of the flanges of the reflector, the ball stud releasably engageable with the spring latch in order to effect the snap-fit connection.

13. The reflector and RF screen assembly of claim 11, further comprising:  
a gasket disposed between the RF screen and the reflector;  
wherein the snap-fit fasteners are a plurality of ball studs located on one side of  
the frame of the RF screen and a pair of ball studs located on the other side of the  
5 frame of the RF screen such that the screen of the RF screen is between each pair of  
ball studs, the ball studs extend through the gasket;  
wherein a pair of spring latches are located on each of the flanges of the pair of  
flanges of the reflector; and  
wherein the ball studs are releasably engageable with the spring latches in order  
10 to effect the snap-fit connection.

14. The reflector and RF screen assembly of claim 11, wherein at least one of the  
snap-fit fasteners is a spring retainer having a spring clip located on the frame of the RF  
screen or one of the flanges of the reflector, and having a notch present in the other of  
the frame of the RF screen or one of the flanges of the reflector, the spring clip  
5 releasably engageable with the notch in order to effect the snap-fit connection.

15. The reflector and RF screen assembly of claim 11, further comprising:  
a gasket disposed between the RF screen and the reflector;  
wherein the snap-fit fastener includes a plurality of spring clips located on the  
frame of the RF screen on one side of the screen of the RF screen, and three spring  
5 clips located on the frame of the RF screen on the other side of the screen of the RF  
screen;  
wherein the snap-fit fastener includes three notches present in one of the flanges  
of the reflector, and three notches present in the other flange of the reflector; and  
wherein the spring clips are releasably engageable with the notches in order to  
10 effect the snap-fit connection.

16. The reflector and RF screen assembly of claim 11, wherein the frame of the RF  
screen has at least one slot located thereon for aiding in the removal of the RF screen  
from the reflector.

17. The reflector and RF screen assembly of claim 11, further comprising a gasket located between the reflector and the RF screen, and wherein the gasket is selected from the group consisting of a metallic finger gasket, and a metallic fabric wrapped around an elastomer sponge core center gasket.

18. The reflector and RF screen assembly of claim 11, wherein at least one of the snap-fit fasteners is a finger gasket assembly having a metallic finger gasket located on the frame of the RF screen or one of the flanges of the reflector, and having a notch present in the other of the frame of the RF screen or one of the flanges of the reflector,  
5 the metallic finger gasket releasably engageable with the notch in order to effect the snap-fit connection, and the finger gasket assembly aiding in sealing a cavity defined by the reflector and the RF screen.

19. The reflector and RF screen assembly of claim 11, wherein one of the snap-fit fasteners is a magnetic fastener.

20. The reflector and RF screen assembly of claim 11, wherein one of the snap-fit fasteners is a quarter turn type fastener.

21. A reflector and RF screen assembly for a UV lamp system, comprising:  
a reflector having a curved reflecting surface and a pair of flanges;  
a spring latch located on one of the flanges of the reflector;  
an RF screen having a frame and a fine mesh screen retained by the frame;  
5 a ball stud located on the frame of the RF screen, wherein the ball stud is releasably engageable with the spring latch in order to releasably attach the RF screen to the reflector; and  
a metal fabric wrapped around an elastomer sponge core center gasket disposed between the frame of the RF screen and the pair of flanges of the reflector, the ball stud  
10 disposed through the gasket.

22. A reflector and RF screen assembly for a UV lamp system, comprising:  
a reflector having a curved reflecting surface and a pair of flanges; and  
an RF screen having a frame and a screen retained by the frame, the RF screen  
releasably attached to the reflector by a snap-fit connection comprising at least one  
5 male connector and at least one female connector.